Public Health Reporting Options for Meaningful Use Stages 1 and 2 for Eligible Hospitals

This information is subject to change. Please check the IL-HIE website for updates.

Meaningful Use Stages 1 and 2[1,2]

There are three public health objectives for Meaningful Use (MU): Electronic Laboratory Reporting (ELR), Syndromic Surveillance (SS), and Immunization Registry Reporting. To demonstrate Public Health MU in Stage 1, eligible hospitals must demonstrate **one** of the three public health objectives, by submitting at least one test of reportable data to the appropriate surveillance system. During Stage 2, hospitals must begin submitting continuous data for all three public health items. Hospitals should begin efforts aimed at achieving Stage 2 requirements well in advance of the deadlines established by Centers for Medicaid and Medicare (CMS).

All data must be submitted to public health using software certified by an Office of the National Coordinator for Health Information Technology – Authorized Testing and Certification Body and must meet the standards presented in Table 1.

Table 1. Meaningful Use Requirements for Stages 1 and 2

Data Type	IDPH System	Requirements		Vocabulary Standards	Exchange Standards
		Stage 1 Hospital can choose **one** of three public health objectives from the menu set	**Stage 2** Hospital must send data to all **three** public health systems.		
Electronic Laboratory Reporting	I-NEDSS	Send at least one test submission of reportable lab results to I-NEDSS	Send ongoing submission to I-NEDSS	SNOMED-CT LOINC ver. 2.40	Standard – HL7 2.5.1
Syndromic Surveillance	BioSense2.0	Send at least one test submission of syndromic surveillance data to the PHN	Send ongoing submission to IDPH through the PHN	No standard vocabulary – required data elements must be sent	Standard – HL7 2.5.1
Immunization	I-CARE	Send at least one test submission to I-CARE	Send ongoing submission to I-CARE	Hl7 Standard Code Set CVX Vaccines Administered	Standard – HL7 2.5.1

Because hospitals and IDPH programs have different capabilities and the ultimate destination for MU data differs, various requirements and options exist for MU reporting, as outlined below.

Syndromic surveillance data sent to IDPH must be routed through the Public Health Node (PHN). Medical Research Analytics and Informatics Alliance (MRAIA) is a non-profit entity that houses the PHN and serves as an agent of the Illinois Department of Public Health (IDPH) for the purpose of collecting MU data from hospitals and health care providers.

The PHN also supports the submission of ELR and immunization registry data and the technical receipt, aggregation and transformation of data sent to IDPH from hospital facilities.

[1]This info is subject to change. Hospitals should check the ILHIE website for updates. http://www2.illinois.gov/gov/HIE/Pages/providers-dp.aspx

[2]For eligible hospitals, NO exclusions will be permitted during Stage 2 for any public health item listed below.

In addition, please note that the Illinois Health Information Exchange (ILHIE) can route syndromic surveillance, immunization registry, and ELR data to the PHN.

Data Standards

While the final federal rule specifies the data elements that are required to meet the MU requirements for each of the public health objectives, state health departments have jurisdiction over the implementation of the program in their areas. IDPH has developed technical guidelines, use cases, data transport protocols, and approval criteria for each of the MU objectives. **IDPH evaluates each eligible hospital's data submission to determine if it has successfully completed the attestation process and, for Stage 2, will send the submitter a letter to certify that requirements have or have not been met.**

To attest for MU Stages1 and 2, data from eligible hospitals must meet the standards presented in Table 2 below. Assistance with meeting these standards can be provided to some hospitals through the PHN. The file formats the PHN accepts are presented in Table 2.

Data Use Agreements

Several options are available for transmitting data to I-NEDSS, I-CARE, and BioSense. Depending on which option is chosen, the required agreements that must be in place prior to ongoing data submission may vary. Because ELR is stipulated in Illinois' communicable disease reporting rules[3], a Data Use Agreement (DUA) is not needed. However, a DUA is currently required with IDPH to send SS and immunization data. The DUA templates are on the ILHIE website and can be accessed using the following link: http://www2.illinois.gov/gov/HIE/Pages/publichealth.aspx. Contact information for I-CARE, I-NEDSS, and BioSense program managers and technical leads are provided on ILHIE's website.

[3] Illinois Administrative Code 690: Control of Communicable Diseases Code

Steps to Achieve Meaningful Use Compliance for Public Health Menu Objectives in Illinois

Syndromic Surveillance – BioSense via the PHN

Step 1: Sign Required Legal Agreements:
- DUA with IDPH for syndromic surveillance
- DUA with MRAIA Conduit Agreement with Illinois Health Information Exchange (ILHIE) (if sending data via ILHIE)

Step 2: Establish a Connection for Data Exchange (one option required):
- HL-7 2.5.1 message from CCHIT certified system to PHN (preferred format)
- Alternative file requiring transformation sent to the PHN (See Table 2 for information on alternative file formats.)

Note: facilities that send data in the preferred HL-7 format are prioritized. Based on available resources, IDPH will not necessarily be able to transform flat file data. If file transformation services are available, the time required to onboard hospitals that submit data using alternative file formats will vary depending on how many hospitals are already in the queue for file transformation services.

Step 3: Submission of Test Message
- Transformation of file into standard HL-7 message format (if required)
- Successful receipt and processing of file by PHN and BioSense

Step 4: Validation of Data Content
- Verification that all required data elements are sent

Step 5: Confirmation from IDPH
- Receive a letter of certification that the facility has successfully submitted live, continuous data that meets MU Stage 2 requirements.

Note: Hospitals in northeastern Illinois participating in the ESSENCE syndromic surveillance system will be provided with an option to fulfill MU requirements by having their syndromic surveillance data routed from ESSENCE to BioSense, provided the necessary agreements are signed. Hospitals participating in the Gateway ESSENCE syndromic surveillance system will also need to send syndromic surveillance data to the Public Health Node, in order to fulfill IDPH reporting requirements.

Electronic Laboratory Reporting – I-NEDSS

Step 1: Sign Required Legal Agreements:
- A DUA is not required if sending data directly to I-NEDSS
- If data are being sent via the PHN, an agreement with MRAIA may be required in some circumstances

Step 2: Establish a Connection for Data Exchange (one option required):
- HL-7 2.5.1 message from CCHIT certified system to I-NEDSS (preferred format)
- Alternative file requiring transformation sent to the PHN (See Table 2 for information on alternative file formats.)

Note: facilities that send data in the preferred HL-7 format are prioritized. Based on available resources, IDPH will not necessarily be able to transform flat file data. If file transformation services are available,

the time required to onboard hospitals that submit data using alternative file formats will vary depending on how many hospitals are already in the queue for file transformation services.

Step 3: Submission of Test Message
- Review and validate hospital codes and data content
- Test data in I-NEDSS Development environment
- Test data in I-NEDSS Test environment

Step 5: Validation of Data Content
- Validation of data in I-NEDSS Production environment

Step 6: Confirmation from IDPH
- Receive a letter of certification that the facility has successfully submitted live, continuous data that meets MU Stage 2 requirements.

Immunization Registry – I-CARE

Step 1: Sign Required Legal Agreements:
- DUA with IDPH for I-CARE
- If data are being sent via the PHN , an agreement with MRAIA may be required in some circumstances

Step 2: Establish a Connection for Data Exchange (one option required):
- HL-7 2.5.1 message from CCHIT certified system I-CARE (preferred format)
- Alternative file requiring transformation sent to the PHN (See Table 2 for information on alternative file formats.)

Note: facilities that send data in the preferred HL-7 format are prioritized. Based on available resources, IDPH will not necessarily be able to transform flat file data. If file transformation services are available, the time required to onboard hospitals that submit data using alternative file formats will vary depending on how many hospitals are already in the queue for file transformation services.

Step 3 Submission of Test Message
- Review test message data content
- Validate data with I-CARE's HL7 parser
- Email provider/hospital of successful MU test completion
- Test data in I-CARE Test/Development environment

Step 4 Validation of Data Content
- Test and validate the data in I-CARE Production environment

Step 5: Confirmation from IDPH
- Receive a letter of certification that the facility has successfully submitted live, continuous data that meets MU Stage 2 requirements.

Table 2. Acceptable File Formats and Data Standards

	Sending Directly to PH System		Sending via IL-HIE and/or Public Health Node		Links to documentation
Public Health System	**Acceptable Format(s)**	**Connection type**	**Acceptable Format(s)**	**Connection type**	
I-NEDSS Electronic Laboratory Reporting	HL7 2.5.1	SFTP PHINMS	HL7 2.5.1	Live VPN feed ILHIE (should we say more here?)	*HL7 Messaging Standard Version 2.5.2 in PDF* https://www.hl7.org/store/index.cfm *Electronic Laboratory Reporting Use Case v 1.1* http://www2.illinois.gov/gov/HIE/Documents/ELR%20Use%20Case%20HL7%202.5.1.pdf
I-CARE Immunization Registry	HL7 2.5.1	SFTP HTTPS Web Services	HL7 2.5.1	Live feed using VPN File drop using SFTP ILHIE	*HL7 2.5.1 Implementation Guide for Immunization Messaging Release 1.4* http://www.cdc.gov/vaccines/programs/iis/technical-guidance/downloads/hl7guide-1-4-2012-08.pdf *Immunization Use Case Document* http://www2.illinois.gov/gov/HIE/Documents/IllinoisImmunizationUseCase%20Updated_061411.pdf *Technical Application of Use Cases FAQs* http://www2.illinois.gov/gov/HIE/Documents/Technical%20Application%20of%20Use%20Cases%20FAQs.pdf
			CCD 32 NIST xml		*HITSP Summary Documents Using HL7 Continuity of Care Document (CCD) Component Version 2.5* http://www.hitsp.org/ConstructSet_Details.aspx?&PrefixAlpha=4&PrefixNumeric=32
			Flat file (csv or pipe separated, excel, xsl)		File format data sheet available upon request.
BioSense Syndromic Surveillance	Not Applicable	Not Applicable	HL7 2.5.1	Live feed using VPN File drop using SFTP ILHIE	*PHIN Messaging Guide for Syndromic Surveillance: Emergency Department and Urgent Care Data*. Release 1.1 August 2012 http://www.cdc.gov/phin/library/guides/PHIN_MSG_Guide_for_SS_ED_and_UC_Data_v1_1.pdf *Syndromic Surveillance Fact Sheet (IDPH's Simplified Messaging Guide)* http://www2.illinois.gov/gov/HIE/Documents/Syndromic%20Surveillance%20Data%20Fact%20Sheet%20201209 19.pdf
			CCD 32 NIST xml		Industry standard CCD in *Healthcare Information Technology Standards Panel (HITSP) C32 format (version 2.5)* http://www.hitsp.org/ConstructSet_Details.aspx?&PrefixAlpha=4&PrefixNumeric=32
			Flat file (csv or pipe separated, excel, xsl)		First row the column name Columns order as this SS Fact sheet *Syndromic Surveillance Fact Sheet (IDPH's Simplified Messaging Guide)* http://www2.illinois.gov/gov/HIE/Documents/Syndromic%20Surveillance%20Data%20Fact%20Sheet%20201209 19.pdf